Reply to Office action of October 1, 2005

Docket No.: 2565-0236P

AMENDMENTS TO THE SPECIFICATION

Page 28

Please replace the paragraph commencing at line 15 with the following amended

paragraph:

At the time of T0, the key K₁ is supplied, and the encrypting process of the plaintext

data M_1 is started. When the encrypting process of the plaintext data M_1 is started at the time of

T0, the input of the selector 54 is switched to B after the initial value <u>IV IT</u> is once input from

the input A of the selector 54. Further, at the time of X during the plaintext data M₁ is being

encrypted using the key K₁, it is assumed an interrupt IT for requesting to encrypt the plaintext

block data N₁ is generated. The ciphertext block data C₁ becomes to be stored in the memory 55

by the time of T1. Then, at the time of T1, the key K_2 is supplied to the encrypting module 51

due to the generation of the interrupt IT. Further, the selector 54 sets the input to A at the time of

T1. The switch 57 is connected to F at the time of T1. After the time of T1, the plaintext block

data N₁ is encrypted using the key K₂, and the ciphertext block data D₁ is output. At the time of

Y, it is assumed the encryption of the plaintext block data N₁ is finished, and the interrupt IT is

resolved. Due to the resolution of the interrupt IT, at the time of T2, the key K_1 is supplied to the

encrypting module 51, the input of the selector 54 is switched to C, and the switch 57 is

connected to E. By switching the selector 54 to C, the ciphertext block data C₁ stored in the

memory 55 is input for encrypting the plaintext block data M₂, the plaintext block data M₂ is

encrypted by the encrypting module using the key K_1 , and the ciphertext block data C_2 is output.

Before the time of T3, the input of the selector 54 is switched to B. In case of encrypting the

3

Application No. 09/936,570 Amendment dated December 30, 2005

Reply to Office action of October 1, 2005

plaintext block data M3, the ciphertext block data C2 is fed back from a feedback line 65 of a

Docket No.: 2565-0236P

feedback loop and input, the plaintext block data M3 is encrypted by the encrypting module using

the key K_1 , and the ciphertext block data C_3 is output.

4